



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,086	01/11/2006	Francois Biais	4590-475	7310
33308 7590 07/18/2008 LOWE HAUPTMAN & BERNER, LLP 1700 DIAGONAL ROAD, SUITE 300 ALEXANDRIA, VA 22314				
EXAMINER				
NGUYEN, HANH N				
ART UNIT		PAPER NUMBER		
2834				
MAIL DATE		DELIVERY MODE		
07/18/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/564,086

Applicant(s)

BIAIS, FRANCOIS

Examiner

HANH N. NGUYEN

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 is/are allowed.
- 6) ☒ Claim(s) 8, 9, 14, 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 10-13, 15, 16, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Remarks

1. In view of amendments and Applicant's arguments, the Examiner withdraws the objections to claim 17. The addition of claims 18-21 has been acknowledged.

Claim Objections

2. Claim 19 is objected to because there is no antecedent basis in claim 8 for "the major core portion". Since "the major core portion" is supported by claim 18, the Examiner believes that claim 19 should be dependent claim of claim 18. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 8, 9, 14, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al (US 3,963,950).

Regarding claim 8, Watanabe et al. disclose a stator of an electric machine comprising: an autonomous cooling circuit (10, 10', 11 and 11' in Figs. 1 and 3), means for sealing (tube 6) the cooling circuit with respect to a rotor of the electric machine, a magnetic circuit comprising slots (slots accommodate windings 2 as shown in Fig. 4), and a winding (2) arranged in the slots, wherein the stator comprises a two part magnetic circuit (as shown in Figs. 1 and 4, the first part of the magnetic circuit is back

iron 1 to form magnetic return path and the second part is the windings 2) whose parts are separated by a fluid tight shell (resin 5 and 13).

Regarding claim 9, Watanabe et al. disclose a stator of an electric machine wherein the shell (5 and 13 in Fig. 2) is of tubular shape and is centered around an axis of revolution of the electric machine.

Regarding claim 14, Watanabe et al. disclose a stator of an electric machine wherein the shell (26) is formed by a coating (covering) of one of the stacks of laminations.

Regarding claim 20, Watanabe et al. disclose a stator wherein the fluid-tight shell (3 and 13) forms part of the cooling circuit sealing means (it is inherent that insulator 5 made of plastic material and resin 5 help to seal cooling flow).

Regarding claim 21, Watanabe et al. disclose a stator wherein the cooling circuit comprises passages through which coolant flows, the passages being disposed within the slots (Fig. 4 shows passage 7 is between the slots).

Allowable Subject Matter

4. Claim 17 is allowed.
5. Claims 10-13, 15, 16, 18 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if claims 15 and 18 are rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 15, the prior art of record does not show a stator of an electric machine as written in claim 9 wherein the magnetic circuit comprises a first stack of laminations produced outside the shell and a second stack of laminations produced inside the shell.

Regarding claim 17, the prior art of record does not show a stator of an electric machine comprising a magnetic circuit comprising slots, a first stack of laminations disposed outside the shell and a second stack of laminations disposed inside the shell.

Regarding claim 18, the prior art of record does not show a stator of an electric machine as written in claim 8 wherein the stator comprises a two part magnetic circuit comprised of a major magnetic core portion disposed outboard of the fluid-tight shell and a smaller minor magnetic core portion disposed inboard of the fluid-tight shell.

Response to Arguments

7. Applicant's arguments filed 4/14/2008 have been fully considered but they are not persuasive. The applicant's argument is on the ground that the reference the Examiner relies on, Watanabe, fails to show layers 5 and 13 are fluid tight because of the absent of explicit disclosure and pipes 6 is a cooling circuit by itself, therefore pipe 6 can not be a seal mean. The Examiner respectfully disagrees with the Applicant because the drawings are used to describe the structure. Layers 5 and 13 are made of liquid proof material such as plastic or resin and the drawing show no intermittent, perforated or unseal at the ends, therefore layers 5 and 13 are indeed fluid tight. Moreover, it is clear that the cooling circuit of Watanabe is the flow of fluid through the

Art Unit: 2834

stator and tube is the sealing means. For the reasons explained above, the rejection is still deemed proper.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (571) 272-2031. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg, can be reached on (571) 272-2044. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1000.

HNN

July 14, 2008

/Nguyen N Hanh/

Examiner, Art Unit 2834